THE FACTS

Information About Environmental Cleanup at McClellan AFB.

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McClellan Announces a Change to the Groundwater Operable Unit Proposed Plan

In August 1994, the U.S. Air Force completed a Draft Remedial Investigation/Feasibility Study (RI/FS) report for the Groundwater Operable Unit (GW OU) at McClellan Air Force Base. The study was done to seek ways to contain groundwater contamination until final basewide cleanup levels are established in the year 2003. In September of 1994, McClellan AFB, in conjunction with the California Environmental Protection Agency (Cal EPA) and the U.S. EPA, developed a Proposed Plan explaining an interim remedy selection process, a description of alternatives, and the rationale for selection of the preferred alternative.

Each alternative contained three components: target volume, treatment, and end use of the groundwater. Target volume is the amount of groundwater to be pumped and treated to stop further movement of the contamination.

Each target volume has an associated human health risk. The health risk is based on the assumption that an individual would drink two liters of water every day for 70 years.

The proposed plan for the GW OU explained three potential target volumes to achieve containment:

• **MCL** (maximum contaminant level) - Pump and treat groundwater so the remaining groundwater is below MCLs. Under federal drinking water standards, an MCL is the maximum permissible level of a contaminant in water delivered to any user of a public water system (MCLs are established by federal and state agencies for different contaminants). The associated human health risk with a MCL target volume would result in an increase of 3 additional persons in one million possibly developing a cancer. The MCL for trichloroethylene (TCE, the most prevalent contaminant at McClellan AFB) is 5 micrograms per liter, or 5 parts per billion.

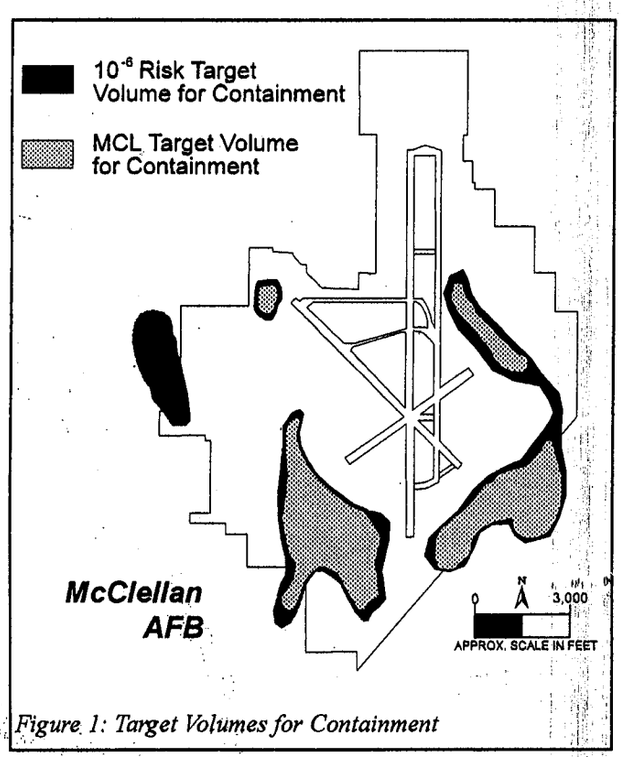
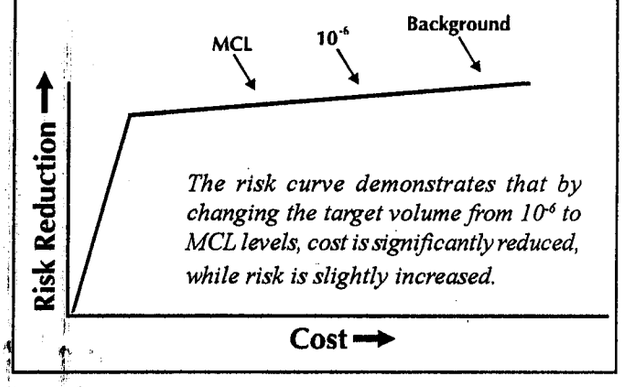


Figure 1: Target Volumes for Containment

• **10^{-6} risk** - Pump and treat groundwater so the associated human health risk with a 10^{-6} target volume would result in an increase of one additional person in one million.

Figure 2: Risk Curve



• **Background** - Pump and treat all contaminated groundwater. There is no additional human health risk when using background target volume.

In the Proposed Plan, the target volume selected for the preferred interim remedy was 10^{-6}. McClellan AFB, in conjunction with the Cal-EPA and US EPA, has decided to change the target volume for the preferred interim remedy to the MCL target volume (see figure 1, left). Groundwater contaminated with levels at or greater than MCLs will be pumped to prevent further migration, both on and off base. The treatment and end-use components will remain the same as presented in the Proposed Plan.

The change to the MCL target volume was made for the following reasons:

• The risks remaining to the public are virtually the same after containing either the MCL target volume or the 10^{-6} risk target volume (see figure 2, above).

• Use of the MCL target volume reduces the amount of groundwater to be pumped. The number of wells, pipelines, and treatment system capacity are therefore reduced, resulting in lower capital costs of as much as $3.3 million for the interim remedy.

••Time to achieve containment is reduced since the volume of groundwater to be contained is reduced. The implementation schedule is shortened by as much as 3 years.

The following table is a comparison of the decision factors - volume, cost, time, and risk for containment of the MCL and risk target volumes.

Comparison of Decision Factors for the MCL and Risk Target Volumes

Decision Factors	MCL Target Volume (new containment goal)	Target Volume (previously selected)	Result
Volume of Groundwater	4.39 billion gallons of groundwater	7.3 billion gallons of groundwater	Reduces amount to be contained to 2.91 billion gallons of groundwater
Cost of the Remedy	Capital: $23.3 million Net Present Value (a): $50.6 million	Capital: $26.6 million Net Present Value (a): $61.7 million	Saves $3.3 million. Saves $11.1 million.
Time to Implement Containment	4 years	7 years	Saves up to 3 years
Remaining Risk after Containment	A three-in-one-million additional risk	A one-in-one-million additional risk	Remaining risk will increase slightly but still falls within the acceptable National Contingency Plan range (b)

(a) Net Present Value assumes an interest rate of 5% and an analysis period of 20 years.

(b) The National Contingency Plan acceptable risk range that remedial actions are expected to achieve is 10^{-4} to 10^{-6}, or 1 in 10,000 to 1 in 1,000,000.

Please Cut along Dotted Line

If you have any comments concerning the changes to the Groundwater Operable Unit Proposed Plan, please cut out the comment card and send it to the return address listed below. Comments will be reflected in the Responsiveness Summary of the Interim Record Of Decision.

Name: _____ Home Phone: _____

Address: _____ Work Phone: _____

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Comments:

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